BIHAR STATE POWER TRANSMISSION COMPANY LTD

132/33 KV GSS BENIPUR

APPRENTICESHIP TRANING REPORT

PRESENTED BY-

SHAFIUDDIN AHMED

ABRDA4646359

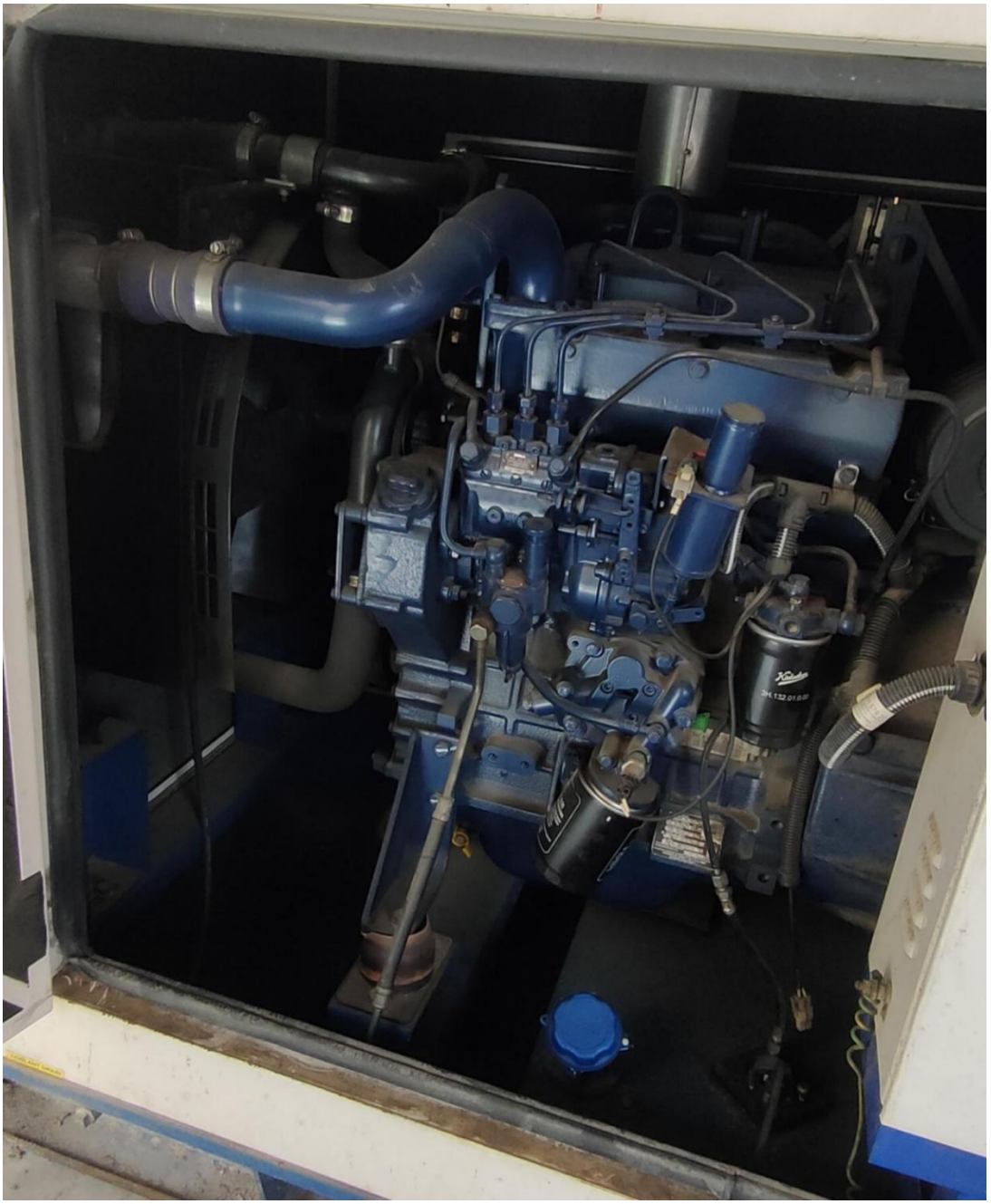
DG ROOM AT GSS-BENIPUR.132/33kv

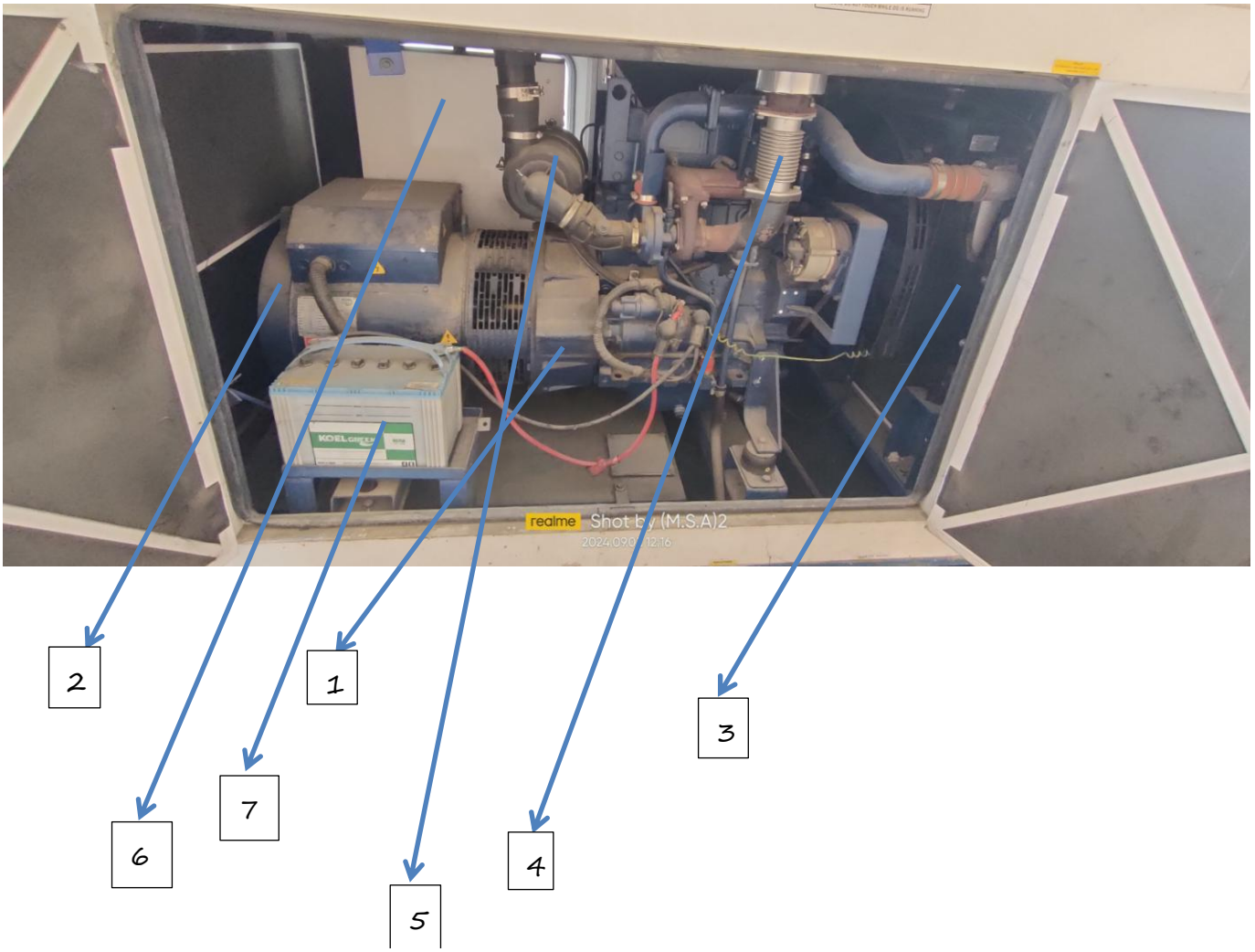
What is generator ?

A Generator is a device which converts mechanical energy into electrical energy. A.C Generator works on the principle of electromagnetic induction. In generator

An electrical machine used to convert mechanical energy into electrical

electric generator, any machine that converts mechanical energy to electricity for transmission and distribution over power lines to domestic, commercial, and industrial customers. Generators also produce the electrical power required for automobiles, aircraft, ships, and trains. electric generator. Also called: dynamo.





Major components of a diesel generator

The major components of a diesel generator can be classified as follows:

1. Diesel Engine:

The source of mechanical energy input for generators. Its size and output capacity determine how much power a unit can generate.

2. Alternator:

Produces electrical energy from the mechanical input supplied by the diesel engine

3. Radiator & Cooling System:

Is using the generator *continuously* heats up various components, the cooling system helps withdraw heat produced when the generator is working.

4Exhaust System:

Exhaust fumes emitted by a diesel generator contain highly toxic chemicals that need to be properly managed.

5. Air Filter:

The filter is composed of fibrous materials, which removes solid particles such as dust, pollen, mold and bacteria from the air.

6. Control Panel:

The user interface controls the generator, including start up and shut down controls, fuel gauges, phase selector switches etc.
Base Frame & Fuel Tank: The base frame provides a structural base support. The fuel tank stores fuel to be used by the generator, and it usually has an adequate capacity to keep the generator to run for 6-8 hours on an average.

7. BATTERY

BATTERY IS USED TO STATRT THE DG

SOME PICTURE OF THE MAJOR COMPONENTS OF A DIESEL GENERATOR.

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SILENCER PROTECTION PLATE
ROPE GUIDE
realme Shot by (M.S.A)2
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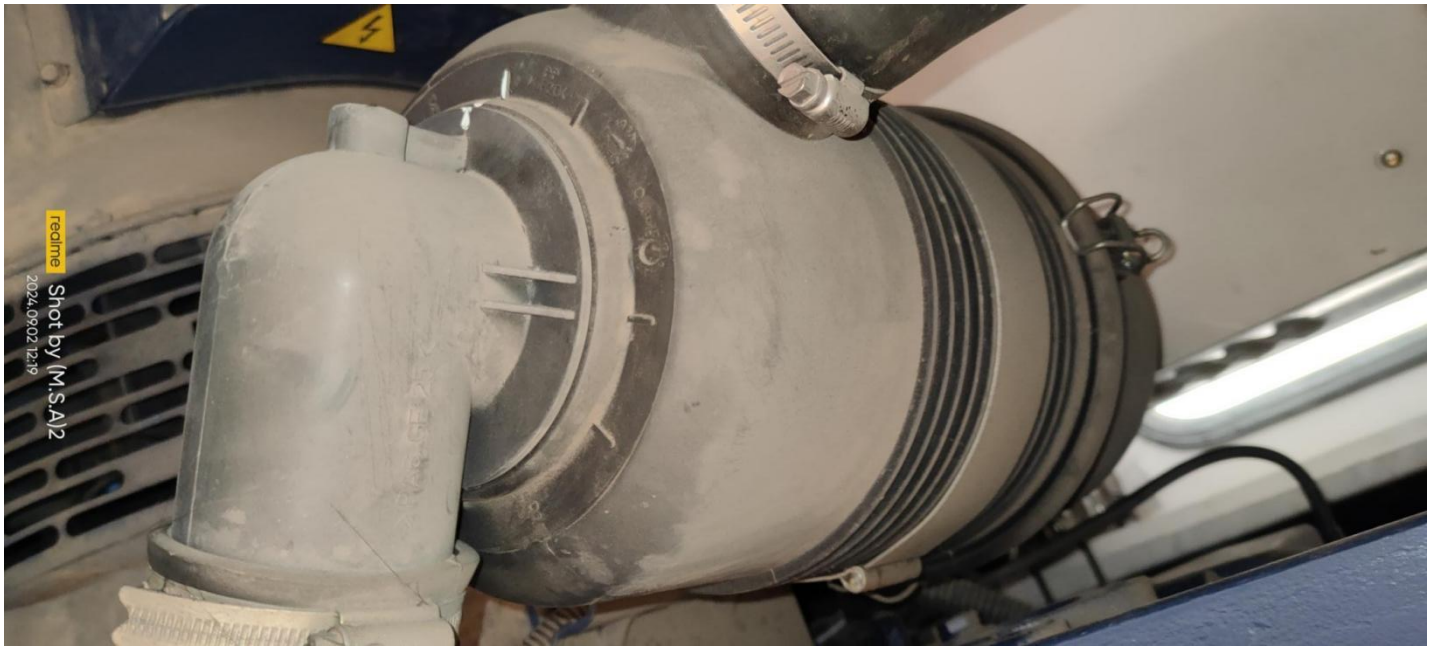
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MAX
MIN
KOEL GREEN
KG75A
12V - 75Ah
realme Shot by (M.S.A)2
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realme Shot by (M.S.A)2
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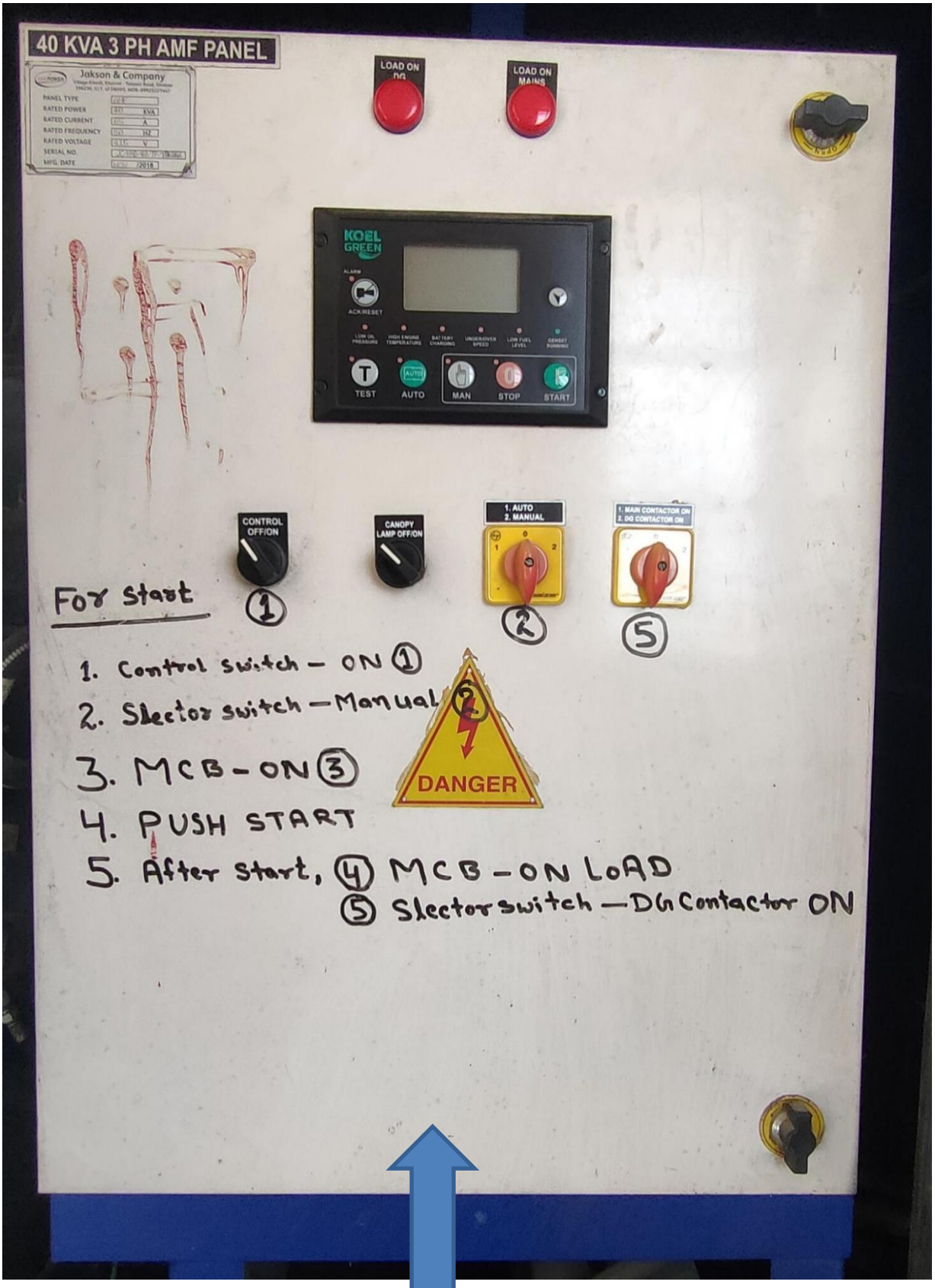
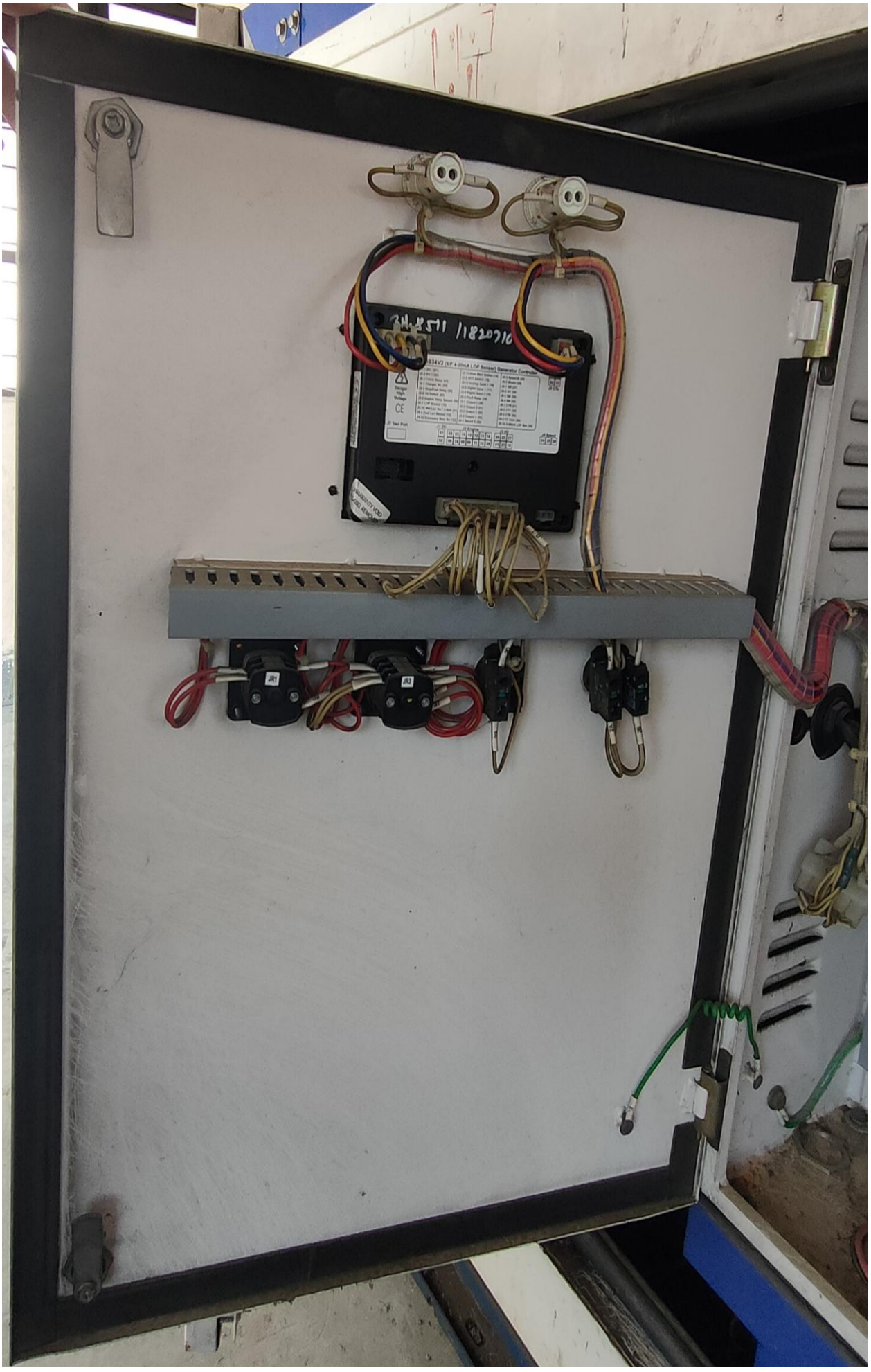
FOR START OF DG SYSTEM



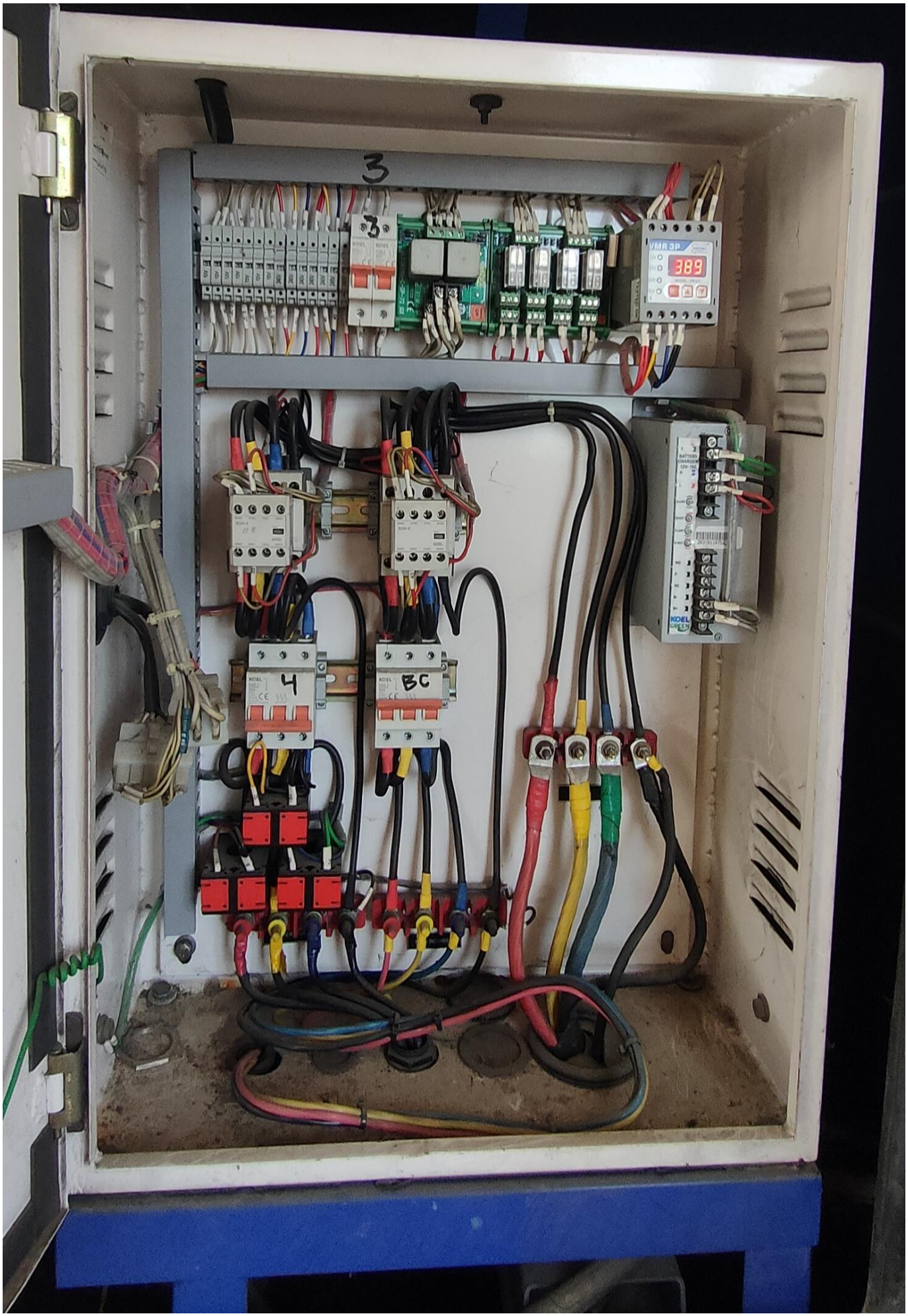
1. CONTRAL SWITCH ON-01
2. SELECT SWITCH - MANUAL
3. MCB NO.3 ON
4. PUSH STATR
5. AFTER START- MCB-ON LOAD. SLECTOR SWITCH-DG CONTACTOR ON

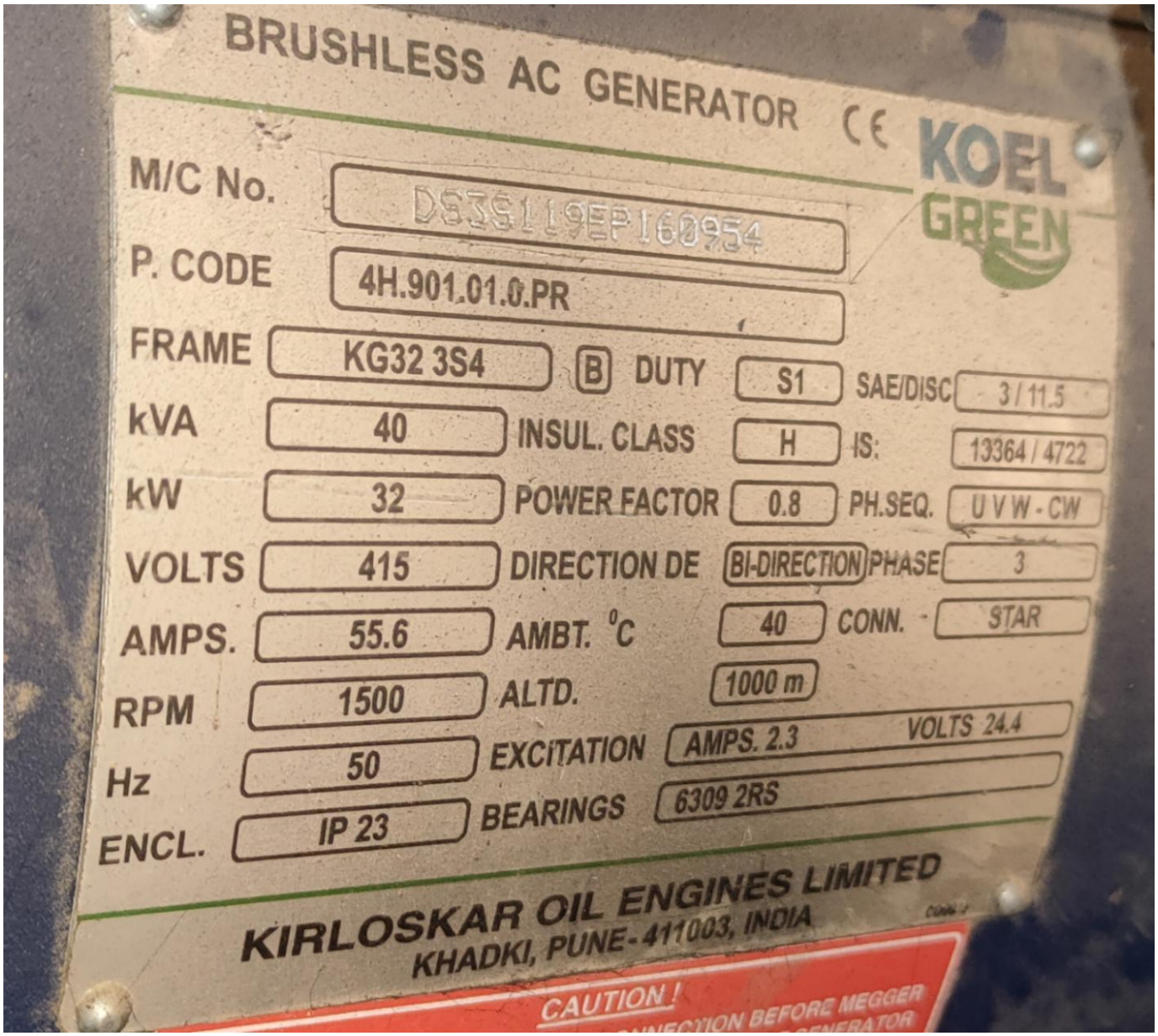
INSIDE VIEW OF CONTROL PANNEL

01



02





IMPORTANT NOTICE

1. First Time, Please do not start Generator set without presence of Jakson & Company representative or Kirloskar representative or Kirloskar authorized dealer representative Get commissioned the Generator set as early as possible after Delivery.
2. Revalidation :- If Generator set kept without commissioning (not in operation after delivery) for 6 months or more without preservation then Engine revalidation must be carried out through Authorized Kirloskar Dealer and Customer has to bear Revalidation cost.

☞ : Disobedience of both above instructions may lead to problem in entertaining warranty claim.

महत्वपूर्ण सूचना

1. पहली बार, कृपया जेनरेटर सेट को जेक्सन एंड कम्पनी के प्रतिनिधि या किर्लोस्कर के प्रतिनिधि या किर्लोस्कर अधिकृत विक्रेता के प्रतिनिधि की उपस्थिति के बिना न चलायें। जेनरेटर प्राप्त होने के बाद तुरंत ही कमीशनिंग करवायें।
2. रिवैलिडेशन (पुनर्वैधीकरण) – यदि जेनरेटर सेट को प्राप्त होने के बाद, बिल तिथि के अनुसार 6 महीने या उससे अधिक समय तक बिना संरक्षण के तथा बिना चलाये रखा जाता है तब कमीशनिंग से पहले इंजन को किर्लोस्कर अधिकृत विक्रेता से रीवैलिडेट करवाना पड़ेगा तथा उपभोक्ता को उसका खर्च उठाना पड़ेगा।

☞ : उपरोक्त दोनो निर्देशों का पालन न करने पर वारंटी प्रभावित हो सकती है।

COOLANT
AFTER RADIATOR FILL, KEEP COOLANT LEVEL AT "MIN"
WHEN ENGINE IS COLD.
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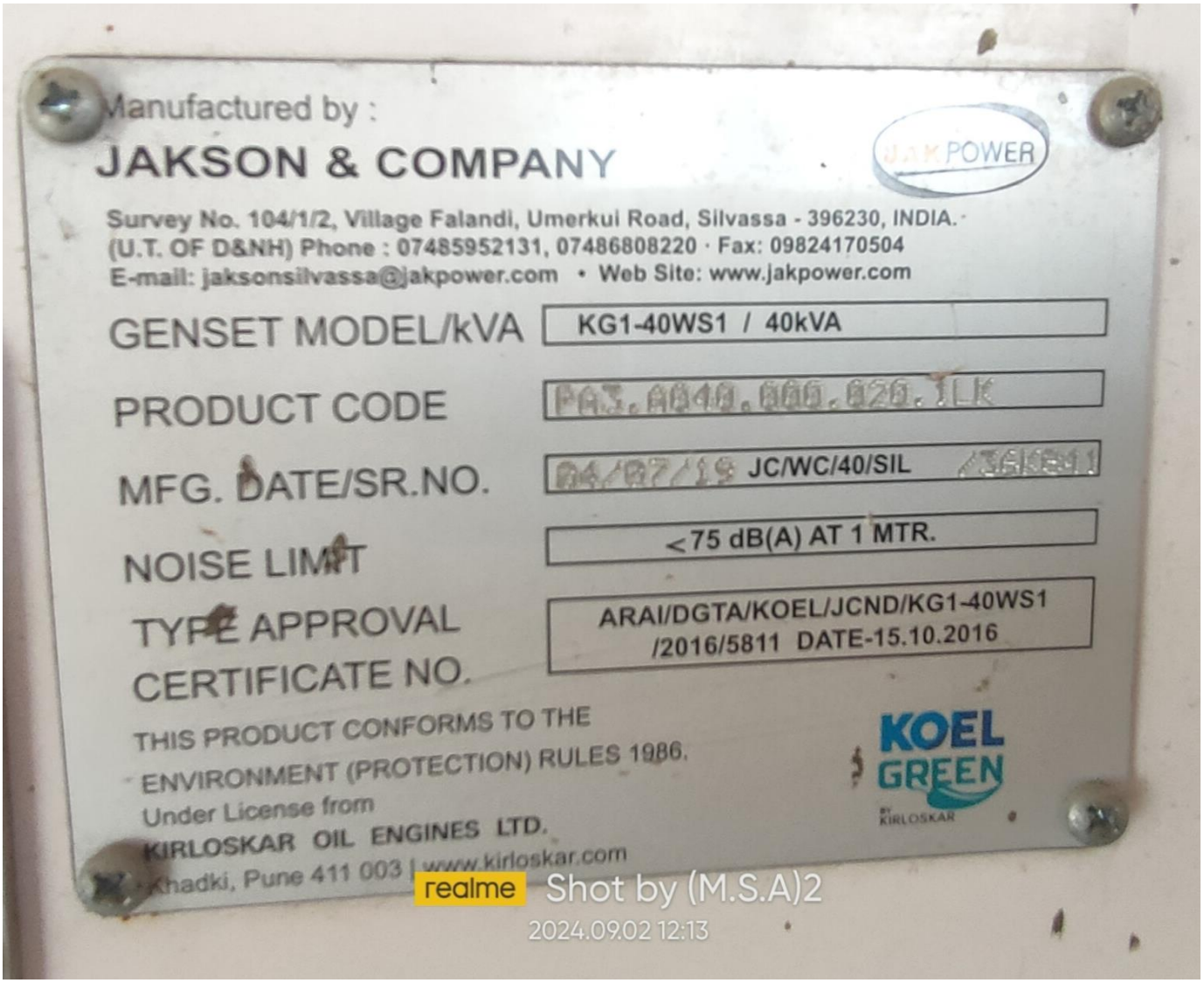
Manufactured by :
JAKSON & COMPANY
JAK POWER
Survey No. 104/1/2, Village Falandi, Umerkui Road, Silvassa - 396230, INDIA.
(U.T. OF D&NH) Phone : 07485952131, 07486808220 · Fax: 09824170504
E-mail: jaksonsilvassa@jakpower.com • Web Site: www.jakpower.com
GENSET MODEL/kVA
KG1-40WS1 / 40kVA
PRODUCT CODE
PAI.A049.000.020.ILK
MFG. DATE/SR.NO.
04/07/19 JC/WC/40/SIL
NOISE LIMIT
<75 dB(A) AT 1 MTR.
TYPE APPROVAL CERTIFICATE NO.
ARAI/DGTA/KOEL/JCND/KG1-40WS1 /2016/5811 DATE-15.10.2016
THIS PRODUCT CONFORMS TO THE ENVIRONMENT (PROTECTION) RULES 1986.
Under License from
KIRLOSKAR OIL ENGINES LTD.
Khadki, Pune 411 003 | www.kirloskar.com
KOEL GREEN
BY KIRLOSKAR
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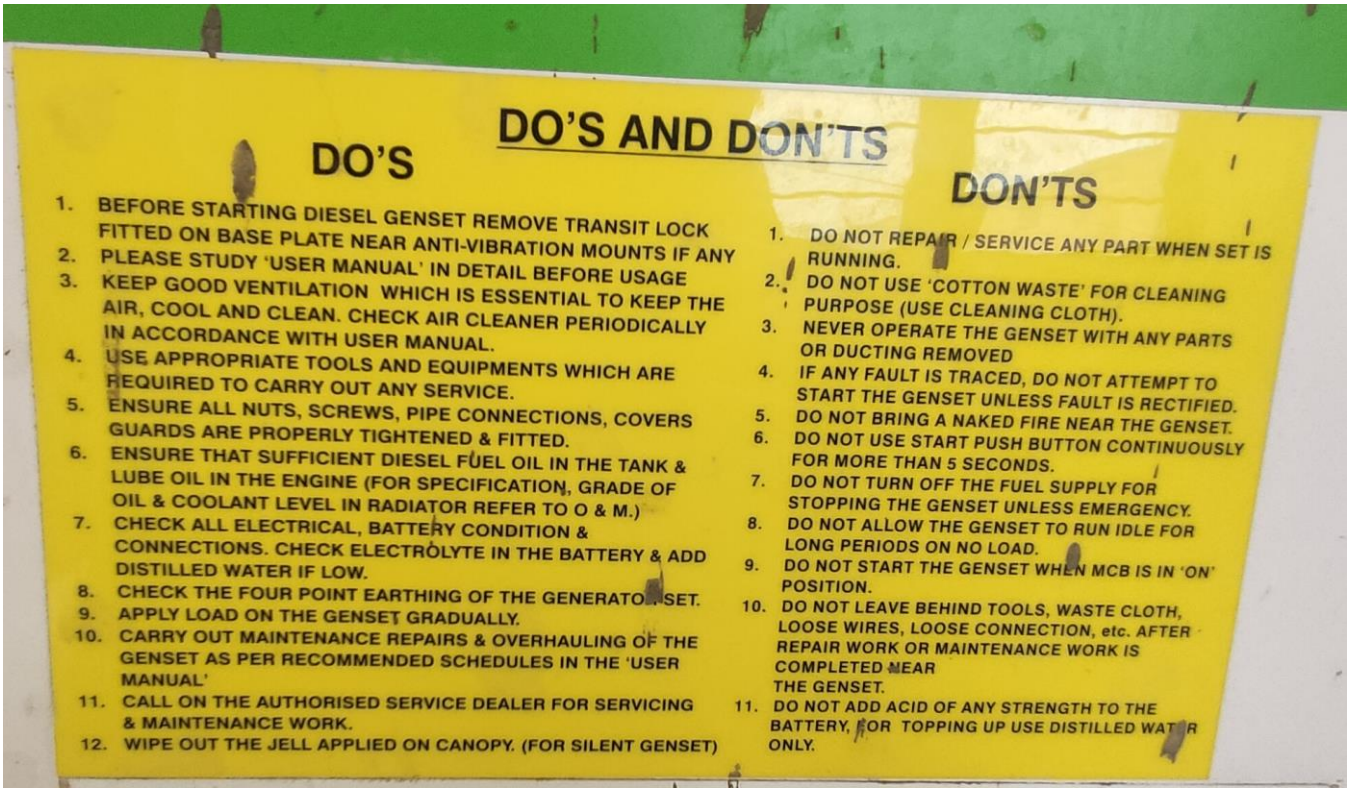
DO'S AND DON'TS
DO'S
1. BEFORE STARTING DIESEL GENSET REMOVE TRANSIT LOCK FITTED ON BASE PLATE NEAR ANTI-VIBRATION MOUNTS IF ANY
2. PLEASE STUDY 'USER MANUAL' IN DETAIL BEFORE USAGE
3. KEEP GOOD VENTILATION WHICH IS ESSENTIAL TO KEEP THE AIR, COOL AND CLEAN. CHECK AIR CLEANER PERIODICALLY IN ACCORDANCE WITH USER MANUAL.
4. USE APPROPRIATE TOOLS AND EQUIPMENTS WHICH ARE REQUIRED TO CARRY OUT ANY SERVICE.
5. ENSURE ALL NUTS, SCREWS, PIPE CONNECTIONS, COVERS GUARDS ARE PROPERLY TIGHTENED & FITTED.
6. ENSURE THAT SUFFICIENT DIESEL FUEL OIL IN THE TANK & LUBE OIL IN THE ENGINE (FOR SPECIFICATION, GRADE OF OIL & COOLANT LEVEL IN RADIATOR REFER TO O & M.)
7. CHECK ALL ELECTRICAL, BATTERY CONDITION & CONNECTIONS. CHECK ELECTROLYTE IN THE BATTERY & ADD DISTILLED WATER IF LOW.
8. CHECK THE FOUR POINT EARTHING OF THE GENERATOR SET.
9. APPLY LOAD ON THE GENSET GRADUALLY.
10. CARRY OUT MAINTENANCE REPAIRS & OVERHAULING OF THE GENSET AS PER RECOMMENDED SCHEDULES IN THE 'USER MANUAL'
11. CALL ON THE AUTHORISED SERVICE DEALER FOR SERVICING & MAINTENANCE WORK.
12. WIPE OUT THE JELL APPLIED ON CANOPY. (FOR SILENT GENSET)
DON'TS
1. DO NOT REPAIR / SERVICE ANY PART WHEN SET IS RUNNING.
2. DO NOT USE 'COTTON WASTE' FOR CLEANING PURPOSE (USE CLEANING CLOTH).
3. NEVER OPERATE THE GENSET WITH ANY PARTS OR DUCTING REMOVED
4. IF ANY FAULT IS TRACED, DO NOT ATTEMPT TO START THE GENSET UNLESS FAULT IS RECTIFIED.
5. DO NOT BRING A NAKED FIRE NEAR THE GENSET.
6. DO NOT USE START PUSH BUTTON CONTINUOUSLY FOR MORE THAN 5 SECONDS.
7. DO NOT TURN OFF THE FUEL SUPPLY FOR STOPPING THE GENSET UNLESS EMERGENCY.
8. DO NOT ALLOW THE GENSET TO RUN IDLE FOR LONG PERIODS ON NO LOAD.
9. DO NOT START THE GENSET WHEN MCB IS IN 'ON' POSITION.
10. DO NOT LEAVE BEHIND TOOLS, WASTE CLOTH, LOOSE WIRES, LOOSE CONNECTION, etc. AFTER REPAIR WORK OR MAINTENANCE WORK IS COMPLETED NEAR THE GENSET.
11. DO NOT ADD ACID OF ANY STRENGTH TO THE BATTERY. FOR TOPPING UP USE DISTILLED WATER ONLY.

THANK

YOU